DT01 Rec'd PCT/PTC 2 7 DEC 2004

## In the Claims:

Please amend the claims by deleting the text shown as strikethrough and adding the text shown in underline.

- 1.(Currently amended) A method of regenerating a reactor, <u>comprising forming</u> eharacterized in that ammonium salts formed as by-product in the reactor <u>in a are-brought into</u> the gas phase at temperatures of  $\geq 150^{\circ}$ C and <u>taking the ammonium salts</u> taken from the reactor in gaseous form.
- 2. (Currently amended) A process for preparing a product, in which ammonium salt is formed as by-product, comprising bringing ammonium salts formed as by-product characterized in that a regeneration step in which ammonium salts formed as by-product are brought into the gas phase at temperatures of  $\geq 150$ °C.
- 3. (Currently amended) The process as claimed in claim 2, wherein characterized in that the ammonium salts which have been brought into the gas phase are separated off.
- 4. (Currently amended) The process as claimed in <u>claim 2</u>, <u>wherein</u> <u>either of claims 2 and 3</u>, <u>characterized in that</u> the product is a single-component precursor of nonoxidic ceramics.
- 5. (Currently amended) The process as claimed in claim 4, wherein characterized in that the product is a compound which has the structural feature X-N-Y, where X and Y can each be, independently of one another, Si, P, Al, Ti, V, Zr, B, Ga or/and In.
- 6. (Currently amended) The process as claimed in <u>claim 5</u>, <u>wherein</u> any of claims 2 to 5, <del>characterized in that</del> the compound has the formula (I) R<sub>x</sub>Hal<sub>3-x</sub>Si-NR<sup>1</sup>-BR<sub>y</sub>Hal<sub>2-y</sub>,

where the radicals Hal are each, independently of one another, Cl, Br or I, the radicals R are each, independently of one another, a hydrocarbon radical having from 1 to 20 carbon atoms or hydrogen,

 $R^1$  is a hydrocarbon radical having from 1 to 20 carbon atoms or hydrogen, x is 0, 1 or 2 and

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y is 0 or 1.

- 7. (Currently amended) The process as claimed in <u>claim 4</u>, wherein any of claims 2 to 4, eharacterized in that the synthesis of the product, in particular a single-component precursor, is carried out in a two-stage reaction process, in particular in the gas phase.
- 8. (Currently amended) The process as claimed in <u>claim 4</u>, <u>wherein</u> <del>any of claims 2 to 7</del>, <del>characterized in that</del> the process further comprises the steps
  - (i) <u>synthesizing synthesis of</u> a product, in particular a single-component precursor of nonoxidic ceramics having a nitrogen bridging function, in a two-stage reaction, in particular in the gas phase and
  - (ii) regenerating regeneration of the reactor by heating to temperatures of  $\geq 150^{\circ}$ C.
- 9. (Currently amended) The process as claimed in <u>claim 8</u>, <u>wherein any of claims 2 to 8</u>, <u>characterized in that</u> the synthesis phase and the regeneration phase are carried out alternatively a plurality of times and, in particular, are carried out cyclically in succession.
- 10. (Currently amended) The process as claimed in <u>claim 8</u>, <u>wherein any of claims 2 to 9</u>, <del>characterized in that</del> the switching over between the synthesis phase and the regeneration phase is controlled by the total pressure drop in the reaction steps.
- 11. (Currently amended) The process as claimed in <u>claim 8</u>, <u>wherein any of claims 2 to 10</u>, <u>characterized in that</u> the change between <u>synthesis production</u> phase and regeneration phase is controlled by a temperature change.
- 12. (Currently amended) A pseudocontinuous process for preparing a product, in which an ammonium salt is formed as by-product and the preparation is carried out in a two-stage reaction, comprising using characterized in that two apparatuses are used per reaction stage, of which one

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is operated in the production mode and the other is operated in the regeneration mode, i.e. at temperatures of  $\geq 150$  °C.

- 13. (Currently amended) The process as claimed in <u>claim 12</u>, <u>wherein any of the preceding</u> elaims, characterized in that the product is isolated from the remaining components of the reaction mixture, in particular by crystallization, condensation and/or the use of a solvent.
- 14. (Currently amended) The process as claimed in <u>claim 12</u>, <u>wherein</u> any of claims 2 to 13, <u>characterized in that</u> unreacted starting materials are recycled.
- 15. (Currently amended) The process as claimed in <u>claim 12</u>, <u>wherein</u> any of claims 1 to 14, eharacterized in that MeNH<sub>2</sub> and at least one of the compounds SiCl<sub>4</sub>, BCl<sub>3</sub>, PCl<sub>3</sub>, PCl<sub>5</sub>, AlCl<sub>3</sub>, GaCl<sub>3</sub>, InCl<sub>3</sub>, TiCl<sub>4</sub>, VCl<sub>3</sub>, VCl<sub>4</sub>, ZrCl<sub>4</sub> or TaCl<sub>5</sub> are used as starting materials for the first reaction step.
- 16. (Currently amended) The process as claimed in <u>claim 12</u>, <u>wherein any of claims 1 to 15</u>, eharacterized in that the intermediate product from the first reaction step and at least one of the compounds SiCl<sub>4</sub>, BCl<sub>3</sub>, PCl<sub>5</sub>, AlCl<sub>3</sub>, GaCl<sub>3</sub>, InCl<sub>3</sub>, TiCl<sub>4</sub>, VCl<sub>3</sub>, VCl<sub>4</sub>, ZrCl<sub>4</sub> or TaCl<sub>5</sub> are used as starting materials for the second reaction step.
- 17. (New) The process as claimed in claim 2, wherein the product is isolated from the remaining components of the reaction mixture, in particular by crystallization, condensation and/or the use of a solvent.
- 18. (New) The process as claimed in claim 1, wherein unreacted starting materials are recycled.
- 19. (New) The process as claimed in claim 2, wherein unreacted starting materials are recycled.

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- 20. (New) The process as claimed in claim 1, wherein MeNH<sub>2</sub> and at least one of the compounds SiCl<sub>4</sub>, BCl<sub>3</sub>, PCl<sub>5</sub>, AlCl<sub>3</sub>, GaCl<sub>3</sub>, InCl<sub>3</sub>, TiCl<sub>4</sub>, VCl<sub>3</sub>, VCl<sub>4</sub>, ZrCl<sub>4</sub> or TaCl<sub>5</sub> are used as starting materials for the first reaction step.
- 21. (New) The process as claimed in claim 2, wherein MeNH<sub>2</sub> and at least one of the compounds SiCl<sub>4</sub>, BCl<sub>3</sub>, PCl<sub>5</sub>, AlCl<sub>3</sub>, GaCl<sub>3</sub>, InCl<sub>3</sub>, TiCl<sub>4</sub>, VCl<sub>3</sub>, VCl<sub>4</sub>, ZrCl<sub>4</sub> or TaCl<sub>5</sub> are used as starting materials for the first reaction step.
- 22. (New) The process as claimed in claim 1, wherein the intermediate product from the first reaction step and at least one of the compounds SiCl<sub>4</sub>, BCl<sub>3</sub>, PCl<sub>5</sub>, AlCl<sub>3</sub>, GaCl<sub>3</sub>, InCl<sub>3</sub>, TiCl<sub>4</sub>, VCl<sub>3</sub>, VCl<sub>4</sub>, ZrCl<sub>4</sub> or TaCl<sub>5</sub> are used as starting materials for the second reaction step.
- 23. (New) The process as claimed in claim 2, wherein the intermediate product from the first reaction step and at least one of the compounds SiCl<sub>4</sub>, BCl<sub>3</sub>, PCl<sub>5</sub>, AlCl<sub>3</sub>, GaCl<sub>3</sub>, InCl<sub>3</sub>, TiCl<sub>4</sub>, VCl<sub>3</sub>, VCl<sub>4</sub>, ZrCl<sub>4</sub> or TaCl<sub>5</sub> are used as starting materials for the second reaction step.

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No new matter is presented in the priority amendments to the specification and clarifying amendments to the claims. No fees are believed to be due, however, should there be any fees associated with this filing, the Commissioner is hereby authorized to charge Deposit Account No. 19-5029. A duplicate copy of this transmittal is enclosed.

spectfully submitted;

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